



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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● Correction – Home Wiring Services, Inc. Penalties

In the November 2004 edition of the Electrical Currents, Home Wiring Services Inc. was shown to have thirteen violations for failing to obtain an electrical permit with a total penalty amount of \$1,625. That was an error. Home Wiring Services had only one citation for a penalty of \$250. The remaining twelve citations should have been for Home Electronics Inc. for a total penalty of \$1,500.

● Upcoming Stakeholder Meetings

These locations and dates are scheduled for the remaining stakeholder meetings for this year. An additional meeting has been added for the Spokane service area. Regional and Central Office staff will take questions and update stakeholders on the Electrical Program from 6:30 to 8:30 PM at the following locations:

7-Dec Tukwila, 12806 Gateway Dr, L&I Office

8-Dec Everett, 2320 California St.

9-Dec Mount Vernon, 2300 Market St, Cottontree Inn

15-Dec Tacoma, 1102 Tacoma Ave. S, Library

16-Dec Bremerton, 2400 Perry Ave, Perry Grade School

5-Jan Vancouver, 1200 Fort Vancouver Way, PUD

6-Jan Spokane, E1411 Mission, Avista auditorium

● Upcoming Code Update/RCW – WAC Continuing Education Classes

The department is offering the following free CEU classes:

PART 1: 4 hours Code Update, 4 hours RCW-WAC

11-Jan Moses Lake, 3000 W Marina Dr, Best Western Inn

13-Jan Tumwater, 7273 Linderson Way SW, Auditorium

18-Jan Tukwila, 7200 Fun Center Way, Comfort Suites

20-Jan Kennewick, 1101 N Columbia Ctr Blvd, Red Lion

25-Jan Everett, 2800 Pacific Ave, Best Western Cascadia

PART 2: 8 hours Code Update

8-Mar Moses Lake, 3000 W Marina Dr, Best Western Inn

10-Mar Tumwater, 7273 Linderson Way SW, Auditorium

15-Mar Tukwila, 7200 Fun Center Way, Comfort Suites

17-Mar Kennewick, 1101 N Columbia Ctr Blvd, Red Lion

22-Mar Everett, 2800 Pacific Ave, Best Western Cascadia

Classes will be offered on a first serve sign up basis. If you are interested in attending any of these classes, you may apply via email to ElectricalProgram@lni.wa.gov

Listserv members were allowed the first opportunity to enroll in the free classes. If you do not want to miss out on other opportunities like this, sign up for the Listserv by going to <http://www.lni.wa.gov/TradesLicensing/Electrical/> and clicking on Get E-Mail Updates (below the Contact Us button) and following the directions.

● Allowable Use Of Class B “Random” Electrical Inspection Labels

Generally, Class B, random inspection labels [see WAC 296-46B-110(10) and RCW 19.28.006(2)(b)] may not be used on jobs where a cover inspection is necessary. However, when removable tiles in a T-bar ceiling constitute the “cover,” Class B labels are acceptable for circuit extensions through or within the ceiling space. If the department does an inspection and cannot find the work, the contractor may be asked to locate the work behind the tiles.

Class B labels are available at all L&I service locations. They are sold in books of 20 for \$200. After purchase the books can be split up and distributed to the contractor's service trucks or employees involved in electrical service operations within the scope of Class B work.

● Septic System Electrical Installation

Physical limitations of residential on-site septic systems can prevent the required burial depth per NEC table 300.5 for schedule 40 PVC. If schedule 40 PVC is used as the wiring method and the proper depth (i.e. 18” cover) cannot be reached, the raceway must rest on the top of the tank achieving the greatest possible coverage. Any installation, where the conduit length on top of the tank exceeds 4’, must use an approved wiring method (e.g. rigid metal conduit, concrete protection, etc.).

● Clarification For Appeal Procedures

Appeals of department penalty actions are real court hearings held before a judge with either a court reporter or tape recorder present. Penalty appeals are conducted by an unbiased independent agency under very specific procedures found in WAC 296-46B-995. Frivolous appeals are expensive and a drain on resources that could be more productive elsewhere for all involved.

To ensure access to due process for those that seriously desire a judge's decision, individuals should submit appeals that meet the WAC required criteria:

1. Timeliness. Appeals must be received by L&I within 20 calendar days of the issue date of the department letter. Appeals will not be allowed if the appeal is received one day late;
2. Correct appeal deposit fee. A \$200 certified check for **each** citation;
3. Appellants must provide a statement, at time of the appeal, saying why they disagree with the penalty action. Most appeals are received without this statement and/or supporting evidence. When the department receives clear statements or supporting documentation (copies of permits, etc.), citations can often be resolved without the formal hearing.

Any appeal received after the 20-calendar-day deadline and/or without the \$200 certified check will be denied and the penalty becomes final.

● IPEP And EIRS Users – Protect Your Electronic Password

The Electrical Inspection Request System (EIRS) and Internet Purchase of Electrical Permits system (iPEP) are tools that can save you time and money. You can create permits, reprint existing permits, detail your deposit account balance and activity, and initiate inspection requests and monitor inspection results. The department is continuing to develop the ability to show users any corrections that have been issued on a specific permit. Security of our (state) systems is second to none and exceeds that of many large corporations. Control of access to your accounts is your responsibility. Protect your electronic password like you would your checkbook or credit card and change the password frequently. Changing the password in either application changes it in both.

Recently, a Washington electrical contractor discovered an ex-employee and now business competitor was searching in their password protected on-line permit account (EIRS-iPEP). The electrical contractor had previously allowed this employee access to their secret EIRS-iPEP password and didn't change the password when the employee was terminated. The ex-employee was looking up active jobs and contacting builders, taking potential business. The ex-employee even further crossed the line by purchasing permits for his current business using the former employer's password and account. It's wise to remember your cash deposit account and linked EIRS-iPEP account is password protected for a reason, to protect your money and business proprietary information.

If you find a permit in your list that you did not create, contact your local L&I office immediately.

● Heating, Air Conditioning and Refrigeration Outlet

NEC 210.63 requires that a 120-volt single-phase 15 or 20 amp receptacle be located within 25 feet of the HVAC/R equipment. The outlet must be at the same level (see *Electrical Currents*, October 2004, Outdoor Receptacles Accessible From Grade Level) as the equipment and must be at an accessible location for servicing of the equipment. This requirement must be met on all new installations and on some existing installations where the branch circuit feeding the equipment is a new installation. When the work being performed is only a like-in-kind replacement of an existing HVAC/R unit the service outlet in 210.63 is not required.

● Electrical Question of the Month

This Month's Question: In a 120 Volt system the current draw on a circuit is 15 amps. The conductors feeding the load are 240 feet long one way and the wire size is stranded #10 copper THHN. What is the voltage being dropped on the conductor for the circuit? **A)** 8.9 Volts, **B)** 5.7 Volts, **C)** 14.7 Volts, **D)** 2.1 Volts

Last Month's Question: When the equipment grounding conductor is not part of a cable assembly, what is the minimum copper equipment grounding conductor size for 100 amp, 12,470 volt ungrounded conductors with 60 amp overcurrent protection? **A)** 10 AWG, **B)** 8 AWG, **C)** 6 AWG, **D)** 4 AWG. The answer is: **C)** [NEC 250.190].